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10/568,035

02/10/2006

Carl Christensen

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EXAMINER

JONES, PRENELL P

ART UNIT

PAPER NUMBER

2467

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/568,035 | Applicant(s) CHRISTENSEN, CARL | |
| | Examiner PRENELL P. JONES | Art Unit 2467 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.
2. In light of Applicant's amendment to claims, Examiner withdraws previous 112 and rejections and objections.
3. Applicant argues that the combined prior art fail to teach a broadcast router that includes a first and second chassis.
4. After revisiting the previously cited prior art, Examiner has withdrawn previous 103 rejections. Although the combined cited art of Kimura et al and Tani et al does teach switching configurations; specifically, a multicast router (broadcast router), combined Kimura et al and Tani et al fail to teach a broadcast router including a first and second chassis. Therefore, Examiner has performed an additional search and the newly cited prior art of Toutant et al (US PG PUB 2003/0099247) is utilized in the rejection that follows.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
6. Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toutant et al (US PG PUB 2003/0099247 in view of Kimura et al (US Patent 6,459,699).

Regarding claim 1, Toutant discloses a multi-chassis broadcast router comprises at least one first chassis, having one of a first, a second, and a third configuration, the first configuration including a plurality of input cards and no output cards, the second configuration including a plurality of output cards and no input cards, and the third configuration including a plurality of input and output cards; and

at least a second chassis, having one of the second configuration and first configuration when the first chassis has the first and second configuration, respectively (Toutant et al (US PG PUB 2003/0099247) discloses a multi-chassis broadcast router wherein a first chassis (Fig. 1 and 3A, elements 100 and 310) and a second chassis (Figs. 3A and 3B, element 320).

Although Toutant is not clear on multi-stage I/O configurations, Kimura discloses an multi-stage configuration ATM router (switch configuration) wherein the architecture includes a plurality of input and output modules/cards (Abstract, Fig. 1, col. 1, line 48 thru col. 3, line 57).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement multi-stage I/O configurations as taught by Kimura's switching configuration with the teachings of Toutant's switching configuration for the purpose of accommodating multiple users simultaneously, thereby improving access.

Regarding claim 2, Toutant further discloses as associated with a broadcast router, wherein the plurality of input cards are for initially receiving data into the broadcast router, and the first configuration of the at least one chassis further includes an expansion card for respectively receiving the data from the plurality of input cards and arranging the data for transfer (Toutant discloses expanding router capacity, Abstract, paragraph 0010).

Regarding claim 5 and 6, as indicated above, combined Toutant and Kimura teaches a broadcast router, wherein the expansion card has a bandwidth sufficient for supporting both the first configuration and the second configuration (Toutant discloses bandwidth path that accommodates I/O line card configuration, paragraph 0028). Toutant further discloses that the configuration is not limited to a specific configuration of line cards (expansion capacity configuration is modifiable to support various configuration, paragraph 0010 and 0028).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Toutant et al (US PG PUB 2003/0099247) in view of Kimura et al (US Patent 6,459,699) as applied to claim 1 above, and further in view of Pescatore et al (US Patent 7,415,551).

Regarding claim 3, as indicated above, Toutant and Kimura combined discloses a broadcast router that includes multiple input/output cards/modules, wherein the router accommodates expansion interfaces.

Although both Toutant and Kimura fail to disclose the broadcast router further including a control card to change input/output assignments, Pescatore discloses servers (routers) that include control logic I/O mapping assignment dictated by a computing environment (alter I/O assignment, Abstract, paragraph 0004)

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement router further including a control card to change input/output assignments as taught by Pescatore with the combined teachings of Toutant and Kimura for the purpose of accommodating multiple users simultaneously, thereby improving access.

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8. Claim 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toutant et al (US PG PUB 2003/0099247 in view of Kimura et al (US Patent 6,459,699) as applied to claim 1 above, and further in view of Sarkinen et al (US PG PUB 2003/0058880).

Regarding claim 4 and 11, as indicated above, Toutant and Kimura combined discloses a broadcast router that includes multiple input/output cards/modules, wherein the router accommodates expansion interfaces.

Although both Toutant and Kimura fail to disclose expansion cards associated with TDM, in a multicasting communication routing environment, Sarkinen discloses a multi-stage configuration switch wherein the architecture includes multiple line cards which accommodate TDM protocol communication (paragraph 0082).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement expansion cards associated with TDM as taught by Sarkinen with the combined teachings of Toutant and Kimura for the purpose of accommodating multiple users simultaneously, thereby improving access.

9. Claim 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Toutant et al (US PG PUB 2003/0099247 in view of Kimura et al (US Patent 6,459,699) as applied to claim 1 above, and further in view of Cloonan et al (US Patent 5,550,815).

Regarding claim 7-10, as indicated above, combined Toutant and Kimura discloses a multi-chassis (first and second chassis) broadcast router that includes multiple input/output cards/modules, wherein the router accommodates expansion interfaces.

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Although combined Toutant and Kimura are silent on utilizing matrix cards, in an ATM packet routing environment, Cloonan discloses matrix modules (Figs. 1 and 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to be motivated to implement matrix modules associated as taught by Cloonan with the combined teachings of Toutant and Kimura for the purpose of accommodating multiple users simultaneously, thereby improving access and reduce data loss.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prenell P. Jones whose telephone number is 571-272-3180. The examiner can normally be reached on 9:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Pankaj Kumar can be reached on 571-272-3011. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Prenell P. Jones

/Prenell P Jones/

Examiner, Art Unit 2467

April 30, 2010

/Pankaj Kumar/

Supervisory Patent Examiner, Art Unit 2467